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OUR STRATEGIC DEPLOYMENT SYSTEM:  
IS IT STRUCTURED TO SUPPORT THE COMBATANT COMMANDER?

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: Ronald P. Heiter

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8 February 1994

Paper directed by  
Captain H. Ward Clark  
Chairman, Department of Military Operations

94-15290



DECLASSIFIED 1

94 5 20 088

## REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>			1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION/AVAILABILITY OF REPORT <b>DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.</b>	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE				
4. PERFORMING ORGANIZATION REPORT NUMBER(S)			5. MONITORING ORGANIZATION REPORT NUMBER(S)	
6a. NAME OF PERFORMING ORGANIZATION <b>OPERATIONS DEPARTMENT</b>		6b. OFFICE SYMBOL (If applicable) <b>C</b>	7a. NAME OF MONITORING ORGANIZATION	
6c. ADDRESS (City, State, and ZIP Code) <b>NAVAL WAR COLLEGE NEWPORT, R.I. 02841</b>			7b. ADDRESS (City, State, and ZIP Code)	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State, and ZIP Code)			10. SOURCE OF FUNDING NUMBERS	
			PROGRAM ELEMENT NO.	PROJECT NO.
			TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) <b>OUR STRATEGIC DEPLOYMENT SYSTEM: IS IT STRUCTURED TO SUPPORT THE COMBATANT COMMANDER? (U)</b>				
12. PERSONAL AUTHOR(S) <b>MAJ RONALD P. HEITER, USA</b>				
13a. TYPE OF REPORT <b>FINAL</b>		13b. TIME COVERED FROM _____ TO _____	14. DATE OF REPORT (Year, Month, Day) <b>8 FEB 94</b>	15. PAGE COUNT <b>30</b>
16. SUPPLEMENTARY NOTATION <b>A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.</b>				
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)	
FIELD	GROUP	SUB-GROUP	STRATEGIC DEPLOYMENT; GLOBAL CAPABILITIES;	
			USTRANSCOM; MARAD; SEALIFT; AIRLIFT; MANPOWER	
19. ABSTRACT (Continue on reverse if necessary and identify by block number) <b>THE STRATEGIC DEPLOYMENT SYSTEM OF THIS NATION WAS FIRST TESTED DURING THE SPANISH-AMERICAN WAR. IT DID NOT DO VERY WELL THEN AND IT DID NOT IMPROVE MUCH AS THE NATION FOUGHT WARS THROUGHOUT THE 20TH CENTURY. IN TODAY'S NEW WORLD ORDER, OUR DEPLOYMENT SYSTEM IS MORE IMPORTANT TO THE OPERATIONAL COMMANDER THAN EVER. THAT COMMANDER IS HIGHLY DEPENDENT ON THIS SYSTEM TO PROVIDE SUFFICIENT STRATEGIC MOBILITY TO MEET HIS FORCE PROJECTION REQUIREMENTS. OPERATION DESERT SHIELD/STORM WAS THE FIRST TRUE TEST OF THE DEPLOYMENT TO MEET A REGIONAL CRISIS, A CRISIS MUCH LIKE WHAT WE EXPECT TO SEE IN THE FUTURE. THE SINGLE MOST IMPORTANT REALIZATION FROM THE WAR WAS THAT EFFORTS OF ORGANIZATIONS WITHIN THE SYSTEM REQUIRED A SINGLE VOICE AT THE TOP. MANAGEMENT AND ORGANIZATIONAL SYNERGY IS MORE IMPORTANT THAN THE SHEER NUMBER OF LIFT ASSETS AVAILABLE. USTRANSCOM PROVIDES THAT STRUCTURED CAPABILITY TO MEET THE PLANNING, RESOURCE PROCUREMENT, AND CONTINGENCY EXECUTION RESPONSE DEMANDED BY THE COMBATANT CINC. THE DEPLOYMENT SYSTEM IS WELL POSTURED TO MEET THE NEEDS OF THE OPERATIONAL LEVEL COMMANDER IN THE FUTURE.</b>				
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>	
22a. NAME OF RESPONSIBLE INDIVIDUAL <b>CHAIRMAN, OPERATIONS DEPARTMENT</b>			22b. TELEPHONE (Include Area Code) <b>841-3414</b>	22c. OFFICE SYMBOL <b>C</b>

# Abstract

OUR STRATEGIC DEPLOYMENT SYSTEM: IS IT STRUCTURED TO SUPPORT THE COMBATANT COMMANDER?

The strategic deployment system of this nation was first tested during the Spanish-American war. It did not do very well then and it did not improve much as the nation fought wars throughout the 20th Century. In today's new world order, our deployment system is more important to the operational commander than ever. That commander is highly dependent on this system to provide sufficient strategic mobility to meet his force projection requirements. Operation Desert Shield/Storm was the first true test of the deployment to meet a regional crisis, a crisis much like what we expect to see in the future. The single most important realization from the war was that efforts of organizations within the system required a single voice at the top. Management and organizational synergy is more important than the sheer number of lift assets available. USTRANSCOM provides that structured capability to meet the planning, resource procurement, and contingency execution response demanded by the combatant CINC. The deployment system is well postured to meet the needs of the operational level commander in the future.

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Unannounced	<input type="checkbox"/>
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By _____	
Distribution /	
Availability Codes	
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A-1	

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OUR STRATEGIC DEPLOYMENT SYSTEM: IS IT STRUCTURED TO SUPPORT THE  
COMBATANT COMMANDER?

Chapter I

INTRODUCTION

"NOTHING HAPPENS UNTIL SOMETHING MOVES"

U.S. ARMY TRANSPORTATION CORPS MAXIM

PURPOSE. This paper will examine the structure of the United States strategic deployment system and it's ability to support the world-wide force projection requirements of the combatant CINC. The combatant CINC must be assured of the viability of the system which makes "something move", because as the operational level commander, he is responsible for making "something happen". These two actions are mutually inclusive for the operational warfighter because even the best trained, equipped and led forces are of little value if he can't get them to the fight in an orderly, timely manner. Operation Desert Shield/Storm is only the latest example of the criticality of the deployment system as the link between National Military Strategy and the operational Commander. Our nation's status of sole surviving superpower, in an era of growing world interdependence and regional volatility, makes ODS unlikely to be the last military operation that will challenge U.S. led forces. This paper will focus on the deployment system as the all-important link between national military strategy and an operational commander's ability to campaign.

**METHOD.** This paper will outline the nature of U.S. global interests and corresponding military requirements. It will assess the deployment system's supportability of a major regional contingency (MRC) requirement. This will be done by a comparison of the missions and functions of the supporting organizations within the strategic deployment system. The analysis will examine functional relationships between those organizations; resources within the deployment system to meet the combatant CINC's requirements; and current initiatives underway to enhance response to crisis situations. Conclusions will center on assessments about the deployment system's structural capability to support the combatant CINC's requirements. Recommendations will be based on those conclusions.

## CHAPTER II

### HISTORICAL PERSPECTIVE

The United States military has been fighting wars overseas for most of the last century. Movement of forces to those conflicts has always been a difficult and perplexing problem. This problem has also been complicated by the fact that most of the capability to move forces resides outside of the military structure. The Spanish-American war was almost lost due to the military's inability to effectively manage the flow of men and material to and through the nation's ports, but more importantly, because of a lack of shipping under US flag.<sup>1</sup> Lessons went unlearned from this and the U.S. entered both World Wars with similar problems.<sup>2</sup> The procurement of ocean shipping from world fleets eventually solved the major deployment problems in World War I. This was accomplished however, only with great difficulty, due to massive shipping losses inflicted by German U-boats. In World War II America again faced a shortage of ocean shipping. This time the country was forced to build a cargo fleet capable of delivering the military's requirements.<sup>3</sup> Only full mobilization and several years of time created the opportunity for the system to meet the demands of moving the necessary forces and material to war.

Force projection capability is the product of forward presence and strategic mobility. The overseas stationing of U.S. forces following the Korean conflict served as a springboard for

the dominance of forward presence vice strategic mobility as the method of choice for U.S. force projection capability. In the bi-polar world of the Cold War, forward presence was readily accepted as both a political statement of U.S. will and a military capacity to augment an underlying strategy of nuclear deterrence. Those dual capabilities, forward presence and nuclear deterrence, plus a significant naval force, overshadowed the need for a strong U.S. deployment system. Threat assessments that included lengthy warning times painted a perception of reduced need for strategic mobility. This resulted in fewer resources provided for, and less attention paid to, our deployment system in the 1950's and into the 1960's.

This trend continued through the 60's and into 1970's, with two notable exceptions. First, there were significant improvements to military strategic airlift. C-141 & C-5 production in support of the Vietnam war, and in maintaining our far-flung military presence, dramatically reduced shipment times for oversized equipment and supplies. The continuation of, and enhancements to, the existing Civil Reserve Airlift Fleet (CRAF) program were also of great importance in developing potential surge airlift capability.<sup>4</sup> Second was the origination and enactment of the concept of prepositioning unit sets of equipment in storage areas at overseas locations.<sup>5</sup> Throughout this time period reliance on WWII era sealift assets, neglect of the merchant marine structure and rampant service-level parochialism were adversely impacting deployment system capability.



Revised threat assessments, and accompanying war-game results, revealed serious shortcomings in the ability of the deployment system to support emerging requirements.<sup>6</sup> Foremost among these requirements was the "10 divisions in 10 days" European support scenario. Even with forward-based divisions and prepositioned sets of equipment, it was shown that "10 in 10" could not be supported by the system as then equipped and structured.<sup>7</sup> Of even more ominous concern was the continuing trouble throughout the strategically important Middle East. Lack of significant infrastructure or forward presence in that area pointed out the difficulty of responding to any short notice crisis. By the latter 1970's the perceived lack of adequate strategic mobility for U.S. forces became a matter of significant concern for military planners.<sup>8</sup> At this point the prepositioning leg of the deployment triad took on even greater significance. Additional division-size sets of Army equipment were authorized to be added to the existing program in Europe.<sup>9</sup> At the same time the concept of prepositioning equipment aboard ships was approved and planning begun.<sup>10</sup>

As the Reagan-era military build-up progressed, mobility programs started prior to his election were being brought to completion. These were predominately sealift programs and included the purchase of eight Fast Sealift Ships, a stand-up of the Maritime Prepositioning Ships (MPS), and creation of the Ready Reserve Force (RRF). The Department of Defense (DoD) Reorganization Act of 1986, and it's creation of USTRANSCOM,

addressed the timeless problems of peacetime inter-service rivalries and the web of command relationships that directed the deployment system. Operation Desert Shield/Storm (ODS) was the first real test of the United States deployment system since World War II. A host of articles, books and research papers have been written which discuss the system's performance in support of that operation. Many reach the conclusion that the results were satisfactory, but that there were problems which required study, solutions and fixes. Some of the lessons learned from ODS were issues already known and documented within the transportation community. The opportunity to expose those problems against an actual requirement resulted in positive action to correct long-standing deficiencies. The structure that controls today's deployment system is, therefore, the end result of a century-long evolution. It is significantly different than from that of just four years ago.

### CHAPTER III

#### STRATEGIC DEPLOYMENT: LINCHPIN OF U.S. MILITARY MEANS

"We see an expanding global prosperity as enhancing our own. With the growing interdependence of nations, America no longer has the luxury of political, economic, or military isolationism. The entire world is our ecological home, our marketplace, and so our security posture must remain global as well.""

Former Secretary of Defense Carlucci, 1989

#### U.S. Interests Require Global Capabilities. Former

Secretary Carlucci's words ring as true today as when he wrote them in 1989. Five years later however, the world is a much different place. The fall of Communism and the new "world order" created significant pressures and a demand for change from the Cold War era. America has put an increased emphasis on domestic issues and spending, while continuing to call for a drawdown of U.S. foreign-based troops. Foreign pressures continue to mount and include a desire for less U.S. military presence, growing nationalism, and the specters of religious fervor, violent border disputes and renewal of age-old conflicts. Ongoing issues include the proliferation of weapons of mass destruction, starvation and human rights abuses throughout the Third World, terrorism, and environmental genocide. These issues are all significant and they create multiple contingency scenarios for which the combatant CINC's must plan.

The confluence of these and other factors have placed great reliance on the strategic deployment system's ability to rapidly move the U.S. military. Today's military is quite different from

that of 1989. It is smaller and less forward deployed. It must be prepared to quickly respond to crisis in a multi-polar instead of a bi-polar environment. The potential need for military action in support of global security still exists, only now it exists in more places than before. Reality is that our forces are simply not in the places they might need to be. Without an efficiently managed strategic deployment system our reduced military cannot execute it's mission of supporting national security needs.

MRC MOVEMENT REQUIREMENTS: CAN THEY BE DEFINED? The answer to that question is no. Change the question to defining goals and the answer becomes a yes. This paper then is an evaluation of the strategic deployment system's ability to support goals associated with an MRC movement requirement. It must be noted that the two are quite different. Requirements are black and white. Goals, especially changing ones, are fuzzy grey.

What needs to move and when does it need to be there? Any movement requirement is the product of these two questions. In the case of an MRC movement requirement it is critical to ascertain what the CINC wants. What are his objectives? The problem is that the dynamics of a crisis situation will usually change the CINC's objectives as you move down the timeline. The 1991 DoD Mobility Requirements Study (MRS), and the recently released Army Strategic Mobility Program (ASMP), try to answer these complex questions. The MRS developed goals for the deployment system. It did so by establishing the time phased

force requirements needed to achieve success (with moderate risk) in a major regional conflict.<sup>12</sup> The study then translated the phases of a combat operation (as listed in the Bottom-up Review)<sup>13</sup> into a required force structure arrayed against a timeline. These phases, objectives and timelines are outlined below.

Phase I	Halt the Invasion	Weeks 0 - 2
Phase II	Build up U.S. Combat Power	Weeks 3 - 8
Phase III	Defeat the enemy	
Phase IV	Provide Post-War Stability	

The Army, which is the primary user of the strategic deployment system, then established it's ASMP from the basis of the goals laid down in the MRS. The timelines for achieving goals of the MRS and ASMP overlap in Phase I. ASMP goals in Phase II extend out to week eleven vice week eight for the MRS.

These goals then become the requirement. Phase I timelines dictate that either prepositioned or air-deployable resources (plus naval forces that don't depend on strategic lift) will make up the forces aligned against that requirement. These forces are described in general terms in the executive summary of the MRS, but for purposes of this research it is not necessary to describe them. The deployment system has been structured and resourced to meet those stated requirements, with moderate risk.

Phase II objectives are a different issue, for several reasons. These include the fact the MRS and ASMP timelines do not match, and because of the potential that Phase I objectives may not have been met. If that is the case, things are then no longer black and white for the deployment system. The point of

this discussion is that the operational commander is not so much concerned with the assets that the strategic deployment system has, or even what potential lift capacity it contains. Instead he is interested in the systems capability to respond to his current requirements and his changing needs. Strategic lift assets are limited by the capacity of our nation to pay for them. There is absolutely nothing the operational commander can do about that. There is however a great deal that the same commander can do to influence the level of support he receives from the system, if that system is properly structured to provide the support the CINC needs.

## CHAPTER IV

### DEPLOYMENT SYSTEM ORGANIZATIONS: MISSIONS AND FUNCTIONS

Our deployment system produces strategic mobility through the collective efforts of a vast network of government, military and civilian entities. This chapter describes the missions and functions of organizations within government that critically impact the deployment system.

POLICY STAFFS. The broad base of resources that provide capability to the nation's strategic deployment system are administered by a wide range of government agencies and civilian industries. Planning and interaction between this myriad of organizations is directed by the policy staffs of two separate Cabinet-level authorities, Department of Transportation (DoT) and Department of Defense (DoD).

DoT missions include:<sup>14</sup>

- (1). Control of the Maritime Administration (MARAD).
- (2). Regulate all highway and rail systems in the U.S.
- (3). Oversee all commercial aviation through the FAA.

DoD missions include:<sup>15</sup>

- (1). Development of transportation policies and programs.
- (2). Conduct studies of mobility issues.
- (3). Make mobility recommendations to National Security Council.
- (4). Interface with civilian industry.

A comparison of the missions of the two policy staffs reveals one thing. Large quantities of the essential elements that comprise our deployment system are administered by DoT and

not DoD. The considerations of an operational-level military commander must, therefore, be taken outside of DoD to be heard.

USTRANSCOM is the single manager of defense common-user transportation. It's mission is to provide air, land, and sea transportation for the DoD in peace and war. USTRANSCOM is a unified command with component commands from the Air Forces Air Mobility Command (AMC), the Army's Military Traffic Management Command (MTMC), and the Navy's Military Sealift Command (MSC).<sup>16</sup>

When the USTRANSCOM was established in 1987 it had an impressive mission statement, but not much real power. This was because the service commanders retained the mission to organize, train and equip their forces, and because CINCTRANS did not control the budget associated with those forces. Lessons learned from Operation Desert Shield/Storm helped to change this, and in February 1992, USTRANSCOM was given control of the component commands in peace and war<sup>17</sup>. They also got control of the transportation accounts in the Defense Operations Fund.

These two actions have the potential to significantly improve the level of support that an operational-level commander can expect from the deployment system. The great lesson from WWII was that the concept of centralized control, decentralized operation, actually worked. That concept now has a chance to impact the procurement, planning and organizational processes of the deployment system. TRANSCOM provides the deployment system a single voice. This means that the operational commander can



pursue capability from the deployment system in a more purposeful manner. Both government controlled and commercial sector resources are now made available through one organization instead of many.

Air Mobility Command (AMC) provides strategic airlift. This simple mission statement belies the critical importance of airlift to the deployment system and to the combatant CINC. AMC controls military airlift assets and coordinates the Civilian Reserve Air Fleet (CRAF). AMC also contracts all commercial air charters. A 1992 reorganization of the then Military Airlift Command (MAC) also brought the important function of aerial refueling capability into AMC.

Military Sealift Command (MSC) is the principle manager and single operating agency for ocean transportation for the DoD. It's primary mission is to provide sealift for strategic mobility in support of national security objectives.<sup>18</sup> MSC functional operations in support of the strategic deployment system can be separated into the three categories of prepositioning, surge and sustainment. It may be just as important to understand what MSC does not do. It does not control the bulk of available government-controlled shipping, nor does it have any role in how the U.S. commercial fleet is administered. The Maritime Administration, under DoT, has these responsibilities.

Military Traffic Management Command (MTMC) has a global mission of traffic management, transportation engineering and water-port operations.<sup>19</sup> It's primary function in support of the

deployment system is the coordination and movement of personnel and equipment to ports of debarkation, and the operation of all seaports through which military deployments are occurring. To perform this mission it directly contracts with railroads, commercial trucking, and freight operating companies.

Maritime Administration (MARAD) has a stated mission to develop and maintain an American merchant marine capable of supporting the nation's shipping needs for commercial and defense requirements. MARAD's functions are:

- (1). Maintain the National Defense Reserve Fleet.
- (2). Operate the Ready Reserve Force (RRF).
- (3). Organize and direct crisis marine operations.
- (4). Government interface with U.S. merchant marine.
- (5). Charters/requisitions ships for defense needs.
- (6). Administers War Risk Insurance Program.

Approximately 95% of all material moving to a war-zone from the U.S. does so via ocean shipping.<sup>20</sup> From a quick review of the above listed functions, it can be seen that MARAD has a predominate role in how effectively this critical part of the deployment system is managed. MARAD is administered by DoT.

## Chapter V

### RESOURCES

Sealift. Maritime sealift assets can be divided into the three general categories of U.S. government-controlled, U.S. flag commercial and foreign-flag ships.

U.S. government-controlled ships include active and inactive ships of the Military Sealift Command, and inactive ships of the Ready Reserve Force (RRF), controlled by the MARAD. MSC controlled ships proved to be the most responsive in meeting the crisis deployment requirements in Operation Desert Shield/Storm (ODS).<sup>21</sup> Assets within this group include the 26 vessels in the prepositioning programs and the fleet of eight Fast Sealift Ships (FSS). Vessels within the RRF include roll-on/roll-off, break-bulk, barge carriers, and Auxiliary crane. Their performance record in ODS has been viewed as less than outstanding.<sup>22</sup>

U.S. flag ships are the maritime shipping assets of the U.S. commercial sector. They have historically been looked at to supply the majority of the deployment system's shipping needs. U.S.-flag ship support in ODS was slow and little, as expected, due to the needs of the industry to retain their profitable shipping routes.<sup>23</sup> The U.S. maritime industry has been on the demise over the past 100 years, revived only during wartime build-up periods.<sup>24</sup> This situation has created a cottage industry in seeking ways to keep the American maritime fleet alive.

Foreign-flag shipping is an asset whose potential was tested in ODS and proved to be capable but problematic.<sup>25</sup> It affords vast sheer tonnage, but also presents various problems that make it unsuitable for consideration in planning to meet a deployment crisis timeline. These include lack of military usefulness, slow reaction time to requirements and crew willingness to support operations in a war-zone.

AIRLIFT. As in the case of sealift, airlift assets can be grouped into two broad categories: government-controlled and commercial. Government controlled airlift includes active airlifters operated by AMC, military aircraft out of the Air Force Reserve Component and those in the Air National Guard. Aircraft in the Civil Reserve Air Fleet (CRAF) constitute the bulk of commercial assets that can be called-up to support military operations. If required, DoD can also charter commercial aircraft.<sup>26</sup>

Military strategic airlift provides the lifeblood of a deployment requirement. The deployment system is highly dependent on these assets to perform a series of critical missions. Military airlift, in the form of C-141 and C-5 aircraft, have the immediate availability, range, speed and versatility to support the operational commanders early-on force closure and sustainment requirements. No other asset exists which duplicates the capability these aircraft provide. Unfortunately, these are extremely limited in number. Total peak inventory was: 265 C141's, 126 C-5's, and 57 KC-10's.<sup>27</sup>

The CRAF is an Air Force directed program set up to use U.S. commercial aircraft under emergency conditions. It is a voluntary program, but becomes a contractual relationship once a carrier enters into it. CRAF has been in existence since 1952 but had never been called into actual operation until Operation Desert Shield.<sup>28</sup> The program is broken down into three stages. Aircraft dedicated to different stages have differing incremental activation procedures which attempt to nullify adverse impacts to the carrier providing the plane and crews. One important point is that CRAF's first stage can be initiated by CINCUSTRANSCOM.

MANPOWER. Trained manpower is one of the critical elements required to ensure the strategic deployment system can provide the expected level of support in a crisis. Ships that normally sit idle have to be crewed. Military aircraft that usually follow channel routes consuming one or two crews, now fly legs many thousands of miles long and require twice as many trained aviators. Ports that normally see little or no military traffic are suddenly jammed with rail cars requiring downloading and ships requiring uploading. Commercial airlines lose pilots who are reservists, while at the same time they are required to provide multiple crews for any CRAF aircraft that may have been activated.

Three manpower areas have the most potential as "showstoppers" for the deployment system. These are inadequate and unqualified mariners to crew our RRF ocean shipping, lack of personnel to man the infrastructure nodes (including seaports) of

the transportation system, and timely reserve call-up sufficient to man both CONUS and theater of operation deployment requirements.

C4 and Information. A system as complex, decentralized and geographically large as the deployment system can only be responsive if one organization is in charge. USTRANSCOM provides that single source of command for the deployment system. It also provides a point of interface for the operational commander in the planning and execution phases of a contingency. In a related and significant step forward, TRANSCOM now requires integration of all transportation related communication and computer systems into one network. Called the Global Transportation Network (GTN), it will offer world-wide user access to information, while providing a single command and control capability.<sup>29</sup> It will serve as an adjunct to the communication system supporting the Joint Operations Planning and Execution System (JOPES). Although only under development at this time, it will serve to orient the C4 and information functions of the deployment system with the operating philosophy of TRANSCOM. The capabilities that GTN will provide are essential to the operational commander as he seeks to coordinate troop movements and equipment shipments according to his priorities.

Infrastructure. The nations roads, bridges, railroads, seaports, and airports comprise what is called infrastructure. Moving equipment from the fort to the port is an essential

element in meeting the overall requirement of the deployment system timelines. Experiences in all stages of Operation Desert Shield proved that many problems exist in this vital area.

## Chapter VI

### INITIATIVES

Ongoing initiatives to improve the capability and effectiveness of the strategic deployment system can be separated into two different categories. They are either programs that are approved, funded and being enacted now, or they are issues that are still only proposals.

Sealift and airlift asset procurement head the list of approved initiatives. Government-controlled sealift will be expanded by the production and purchase of 20 large, medium speed, Ro-Ro (LSMR) ships. Nine of these LSMR's will be used in an Army prepositioning program to put a heavy brigade's worth of equipment afloat. The other eleven will be placed in a status similar to that of the current FSS fleet. In addition, two large container ships will be leased and added to the current afloat prepositioning ships (APS) program.

These procurements were the result of goals established in the Mobility Requirements Study and the findings of a 1993 Rand Corporation study. The Rand study findings showed that enhanced government-controlled ocean shipping programs (MPS, APS, FSS) moved the large majority of cargo delivered to Saudi Arabia during the first 30 days of Operation Desert Shield.<sup>30</sup> Another finding of this study has also been adopted as a goal by the MRS. This is to increase the number of ships in the RRF from the current 96 to a total of 140.



In the area of airlift, the C-17 Globemaster has been under development since 1982, but it's future was not decided until December of 1993. The AMC will buy forty of these cargo aircraft, with a production run covering two and one-half years. Although this represents considerably less outsize lift capacity than originally envisioned by DoD planners, it does offer short-term relief to an ever-growing demand for that capability. AMC will pursue alternative aircraft procurement, should the C-17 program not achieve expected levels of performance. At the top of the list of potential substitutions are used B-747's that may be purchased to replace the aging C-141 fleet.<sup>31</sup> The C-17 was originally slated for that purpose.

Another initiative deals with Air Force reliance during ODS on wide-body commercial aircraft from both charter and CRAF programs.<sup>32</sup> A lesson learned from ODS was that downloading operations were significantly hampered by a lack of adequate material handling equipment for those type planes. Procurement to solve these problems should occur in 1994 and 1995.

A pending initiative deals with the early recall of reservists during a crisis. As discussed in the last chapter, the deployment system is highly dependent upon personnel who are not active duty military members. Reservists are among that group. During ODS it took from 2 August until 22 August before the President signed an executive order invoking the 200K reserve call up. During the ensuing three weeks, massive efforts were required to sustain deployment system operations. By the time

the President signed this order, over 10,000 volunteer reservists had come onto active duty. Examples of their importance to the deployment system during the month of August 1991 are as follows: 42% of the strategic airlift and 33% of the aerial refueling missions were performed by volunteers. 60% of the Military Sealift Commands staff were volunteers.<sup>33</sup> The spirit of volunteers is great, but depending on it in a crisis situation does not seem prudent. This early call-up program may provide an alternative.

## Chapter VII

### CONCLUSIONS

This paper has described the architecture, organizations and resources of the strategic deployment system. That system exists to support the operational commander in the execution of his deployment mission. Our deployment system has undergone a great evolution during the past 100 years. The shift of focus from a superpower conflict in Europe to regional contingencies around the world was completed by our execution of Operation Desert Shield/Storm.

Our strategic deployment system gained a great deal from the experiences and growing pains encountered in that war. Our leaders have truly taken note of needed requirements and have pushed initiatives to consolidated lessons learned into capabilities. The new status and power given to USTRANSCOM is a recognition that deployment requirements demand a centrally managed system, rather than a collection of assets and individual players. USTRANSCOM's focus on deployment issues will ensure that a single voice is speaking to solve the endless problems and compromises inherent in this system. Although problems certainly exist in all areas of the system, the new mindset of singular purpose and focus is more important than any improvement ever made before. Does the deployment system's structure support the operational level commander? The answer is an emphatic yes.

## NOTES

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